WHAT IS CLAIMED IS:

1. A method of manufacturing an abrasive article, the method comprising:

placing abrasive particles on a substrate;

forming a base layer to affix the abrasive particles on the substrate;

forming a binding layer on the base layer;

removing the substrate; and

removing the base layer.

2. The method of claim 1, wherein the abrasive particles are made of diamond, boron nitride, or aluminum oxide.

3. The method of claim 1, wherein the base layer and the binding layer are each formed by a same method or different methods, the methods comprising electroplating, chemical plating, sintering or brazing.

4. The method of claim 1, wherein the base layer and the binding layer are each made of a same material or different materials, the material comprising polymer, metal, metal compound or carbide.

5. The method of claim 4, wherein materials of the base layer and the binding layer are iron, nickel, copper, zinc, tin or an alloy thereof.

6. The method of claim 1, wherein when the abrasive particles are made of diamond, the binding layer is made of chromium, cobalt, tungsten, titanium, zinc, iron, manganese or an alloy thereof.

7. The method of claim 1, wherein when the abrasive particles are made of boron nitride or aluminum oxide, the binding layer is made of aluminum, boron, carbon or silicon.

8. The method of claim 1, wherein the base layer is removed by wet etching or grinding.

9. The method of claim 1, wherein the step of forming the base layer comprises:

forming the base layer to cover the abrasive particles entirely; and

removing an upper portion of the base layer.

10. The method of claim 1, wherein between forming the base layer and forming the binding layer further comprises roughening surfaces of the abrasive particles to increase adhesion between the abrasive particles and the base layer.

11. The method of claim 10, wherein surfaces of the abrasive particles are roughened by oxidation, etching or grinding.

12. The method of claim 1, wherein between forming the binding layer and removing the base layer further comprises performing a heating process to form chemical bonds between the binding layer and the abrasive particles.

13. The method of claim 1, wherein after removing the base layer further comprises forming a protective layer on exposed binding layer and exposed abrasive particles.

14. The method of claim 13, wherein the protective layer is made of metal, metal compound, polymer or a diamond-like material.

15. A method of manufacturing an abrasive article, the method comprising:

placing abrasive particles on a substrate;

forming a base layer to affix the abrasive particles on the substrate;

filling gaps between the abrasive particles with corrosion-resistant particles ;

forming a fixation layer to affix the corrosion-resistant particles in the gaps;

forming a binding layer on the fixation layer;

removing the substrate;

removing the base layer; and

removing the fixation layer.

16. The method of claim 15, wherein the base layer, the fixation layer and the binding layer are each formed by a same method or different methods, the methods comprising electroplating, chemical plating, sintering or brazing.

17. The method of claim 15, wherein the base layer, the fixation layer and the binding layer are each made of a same material or different materials, the material comprising polymer, metal, metal compound, or carbide.

18. The method of claim 17, wherein the base layer, the fixation layer and the binding layer are made of iron, nickel, copper, zinc, tin or an alloy thereof.

19. The method of claim 15, wherein when the abrasive particles are made of diamond, the binding layer is made chromium, cobalt, tungsten, titanium, zinc, iron, manganese or an alloy thereof.

20. The method of claim 15, wherein when the abrasive particles are made of boron nitride or aluminum oxide, the binding layer is made of aluminum, boron, carbon or silicon.

21. The method of claim 15, wherein the corrosion-resistant particles are made of diamond, ceramic, polymer, tungsten carbide or boron nitride.

22. The method of claim 15, wherein the base layer and the fixation layer are removed by wet etching or grinding.

23. The method of claim 15, wherein the step of forming the base layer comprises:

forming the base layer to cover the abrasive particles entirely; and

removing an upper portion of the base layer.

24. The method of claim 15, wherein between forming the base layer and forming the binding layer further comprises roughening surfaces of the abrasive particles and the corrosion-resistant particles to increase adhesion of the abrasive particles and the corrosion-resistant particles with the base layer.

25. The method of claim 24, wherein the surfaces of the abrasive particles and the corrosion-resistant particles are roughened by oxidation, etching or grinding.

26. The method of claim 15, wherein between forming the binding layer and removing the base layer further comprises performing a heating process to cause the binding layer to react with surfaces of the abrasive particles and the corrosion-resistant particles.

27. The method of claim 15, wherein after removing the base layer further comprises forming a protective layer on exposed binding layer, exposed abrasive particles and the corrosion-resistant particles.

28. The method of claim 27, wherein the protective layer is made of metal, metal compound, polymer or a diamond-like material.

29. A method of manufacturing an abrasive article, the method comprising:

forming a first base layer with padding particles on a substrate;

placing abrasive particles on the first base layer;

forming a second base layer to affix the abrasive particles on the first base layer;

forming a binding layer on the second base layer;

removing the substrate; and

removing the first base layer, the padding particles, and the second base layer.

30. The method of claim 29, wherein between the step of forming the second base layer and the step of forming the binding layer, further comprises:

filling gaps between the abrasive particles with corrosion-resistant particles;

forming a fixation layer to affix the corrosion-resistant particles in the gaps.

31. The method of claim 30, wherein after the step of removing the first base layer, the padding particles, and the second base layer, further comprises removing the fixation layer.

32. The method of claim 31, wherein the padding particles are made of a material the same as the abrasive particles.

33. The method of claim 31, wherein the first base layer, the second base layer, the fixation layer and the binding layer are each formed by a same method or different methods, the methods comprising electroplating, chemical plating, sintering or brazing.

34. The method of claim 33, wherein the first base layer with padding particles is formed on the substrate by suspending padding particles in an electroplating solution.

35. The method of claim 31, wherein the first base layer, the second base layer, the fixation layer and the binding layer are each made of a same material or different materials, the material comprising polymer, metal, metal compound or carbide.

36. The method of claim 35, wherein the first base layer, the second base layer, the fixation layer and the binding layer are made of iron, nickel, copper, zinc, tin or an alloy thereof.

37. The method of claim 31, wherein when the abrasive particles are made of diamond, the binding layer is made of chromium, cobalt, tungsten, titanium, zinc, iron, manganese or an alloy thereof.

38. The method of claim 31, wherein when the abrasive particles are made of boron nitride or aluminum oxide, the binding layer is made of aluminum, boron, carbon or silicon.

39. The method of claim 31, wherein the corrosion-resistant particles are made of diamond, ceramic, polymer, tungsten carbide or boron nitride.

40. The method of claim 31, wherein the first base layer, the second layer, and the fixation layer are removed by wet etching or grinding.

41. The method of claim 31, wherein the step of forming the second base layer comprises:

forming the second base layer to cover the abrasive particles entirely; and

removing an upper portion of the second base layer.

42. The method of claim 31, wherein further comprises roughening surfaces of the abrasive particles and the corrosion-resistant particles to

increase adhesion of the abrasive particles and the corrosion-resistant particles.

43. The method of claim 42, wherein the surfaces of the abrasive particles and the corrosion-resistant particles are roughened by oxidation, etching or grinding.

44. The method of claim 31, wherein further comprises performing a heating process to react the binding layer with surfaces of the abrasive particles and the corrosion-resistant particles.

45. The method of claim 31, wherein further comprises forming a protective layer on exposed binding layer, exposed abrasive particles and the corrosion-resistant particles.

46. The method of claim 45, wherein the protective layer is made of metal, metal compound, polymer or a diamond-like material.

47. A method of manufacturing an abrasive article, the method comprising:

placing a mesh on a substrate;

filling openings of the mesh with abrasive particles;

forming a base layer to affix the abrasive particles on the substrate;

forming a binding layer on the base layer;

removing the substrate;

removing the base layer and the mesh.

48. The method of claim 47, wherein between the step of forming the base layer and the step of forming the binding layer, further comprises:

filling gaps between the abrasive particles with corrosion-resistant particles;

forming a fixation layer to affix the corrosion-resistant particles in the gaps.

49. The method of claim 48, wherein after the step of removing the base layer and the mesh, further comprises removing the fixation layer.

50. The method of claim 49, wherein the openings in the mesh are smaller than the abrasive particles to allow tips of the abrasive particles to point down at the substrate.

51. The method of claim 49, wherein the base layer, the fixation layer and the binding layer are each formed by a same method or different methods, the methods comprising electroplating, chemical plating, sintering or brazing.

52. The method of claim 49, wherein the base layer, the fixation layer and the binding layer are each made of a same material or different materials, the material comprising polymer, metal, metal compound or carbid .

53. The method of claim 52, wherein the base layer, the fixation layer and the binding layer are made of iron, nickel, copper, zinc, tin or an alloy thereof.

54. The method of claim 49, wherein when the abrasive particles are made of diamond, the binding layer is made of chromium, cobalt, tungsten, titanium, zinc, iron, manganese or an alloy thereof.

55. The method of claim 49, wherein when the abrasive particles are made of boron nitride or aluminum oxide, the binding layer is made of aluminum, boron, carbon or silicon.

56. The method of claim 49, wherein the corrosion-resistant particles are made of diamond, ceramic, polymer, tungsten carbide or boron nitride.

57. The method of claim 51, wherein when the base layer is formed by electroplating, the mesh is made of a conductive material.

58. The method of claim 49, wherein the base layer and the fixation layer are removed by wet etching or grinding.

59. The method of claim 49, wherein the step of forming the base layer comprises:

forming the base layer to cover the abrasive particles entirely; and removing an upper portion of the base layer.

60. The method of claim 49, wherein between forming the base layer and forming the binding layer further comprises roughening surfaces of the abrasive particles and the corrosion-resistant particles to increase adhesion of the abrasive particles and the corrosion-resistant particles with the base layer.

61. The method of claim 60, wherein the surfaces of the abrasive particles and the corrosion-resistant particles are roughened by oxidation, etching or grinding.

62. The method of claim 49, wherein between forming the binding layer and removing the base layer further comprises performing a heating process to react the binding layer with surfaces of the abrasive particles and the corrosion-resistant particles.

63. The method of claim 49, wherein after removing the base layer further comprises forming a protective layer on exposed binding layer, exposed abrasive particles and the corrosion-resistant particles.

64. The method of claim 63, wherein the protective layer is made of metal, metal compound, polymer or a diamond-like material.

65. An abrasive article, comprising:

a binding layer;

abrasive particles affixed on the binding layer; and

corrosion-resistant particles located in gaps between the abrasive particles.

66. The abrasive article of claim 65, wherein an abrasive surface formed by the abrasive particles is at about a same level.

67. The abrasive article of claim 65, wherein when the abrasive particles are made of diamond, the binding layer is made of chromium, cobalt, tungsten, titanium, zinc, iron, manganese or an alloy thereof.

68. The abrasive article of claim 65, wherein when the abrasive particles are made of boron nitride or aluminum oxide, the binding layer is made of aluminum, boron, carbon or silicon.

69. The abrasive article of claim 65, further comprising a protective layer on the binding layer, the abrasive particles and the corrosion-resistant particles.

70. The abrasive article of claim 69, wherein the protective layer is made of metal, metal compound, polymer or a diamond-like material.

71. The abrasive article of claim 65, wherein the abrasive particles and the corrosion-resistant particles have rough surfaces roughen by oxidation, etching or grinding.